```
=> d his 141-160

     (FILE 'CASREACT' ENTERED AT 16:34:51 ON 25 JUL 2001)

     FILE 'HCAPLUS' ENTERED AT 16:48:27 ON 25 JUL 2001
L41         3941 S JONES C?/AU
L42          270 S TALBOT R?/AU
L43            9 S L41 AND L42
                 SELECT RN L43 1-9

     FILE 'REGISTRY' ENTERED AT 16:50:15 ON 25 JUL 2001
L44           92 S E19-110

     FILE 'HCAPLUS' ENTERED AT 16:51:40 ON 25 JUL 2001
L45            9 S L44 AND L43

     FILE 'REGISTRY' ENTERED AT 17:03:59 ON 25 JUL 2001
L46        58208 S "PHOSPHONO"
L47         4839 S L46 AND PMS/CI
L48            0 S L47 AND "POLYCARBOXYLIC"
L49            3 S "POLYCARBOXYLIC"
L50         1911 S L46 AND "CARBOXYLIC"
L51          156 S L50 AND PMS/CI
L52            0 S L51 AND NC=1

     FILE 'HCAPLUS' ENTERED AT 17:13:52 ON 25 JUL 2001
L53         2647 S ?PENETRANT?
L54           60 S L53(L)?PHOSPHO?
L55       320182 S ?MICROB?
L56            1 S L54 AND L55
L57          902 S ?PHOSPHONO?(5A)?CARBOXYL?
L58            0 S L57 AND L53
L59           16 S L57 AND L55
L60            1 S L57 AND LEATHER
```

=> d bib abs hitstr

L60 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:524410 HCAPLUS
DN 99:124410
TI Pigment preparations for colored dressing agents for **leather** and **leather** substitutes
IN Kolb, Guenter; Tork, Leo; Hoehne, Wolfgang
PA Bayer A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 23 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3203817	A1	19830811	DE 1982-3203817	19820204
	US 4510302	A	19850409	US 1983-459006	19830118
	EP 86354	A2	19830824	EP 1983-100585	19830124
	EP 86354	A3	19831214		
	EP 86354	B1	19850417		
	R: CH, DE, FR, GB, IT, LI, NL				
	JP 58134156	A2	19830810	JP 1983-13002	19830131
	JP 03072107	B4	19911115		
	BR 8300541	A	19831108	BR 1983-541	19830203
	ES 519503	A1	19840316	ES 1983-519503	19830203
PRAI	DE 1982-3203817		19820204		

AB Pigment binders for **leather** finishes comprise a copolymer of an acrylate 10-40, a methacrylate 10-40, N-vinylpyrrolidone 10-30, acrylic acid 5-15, and a vinyl ester 10-20% prepd. in a H2O-miscible org. solvent in the presence of a regulator and a peroxy compd. or a radical-yielding azo compd. Thus, to a mixt. of 17.5 kg glycol monoethyl ether and 17.5 kg ethylene glycol at 90.degree. was added over 4 h a mixt. of Et acrylate 8.75, Me methacrylate 10.5, N-vinylpyrrolidone 7.0, acrylic acid 3.5, vinyl acetate 5.25, 2-mercaptoethanol 0.35, and AIBN 0.7 kg, and the mixt. was heated 2 h at 90.degree. to give 70 kg of 50% polymer (I) [85721-79-5] soln. I soln. 5, H2O 15.6, ethylene glycol 3, 2-**phosphonobutane**-1,2,4-**tricarboxylic** acid 1, 25% NH4OH 1.5, TiO2 pigment 65, pyrogenic silicic acid 0.2, and preservation agent 0.05 kg were mixed 15 min at 200 rpm, and the mixt. was dild. with 8.35 kg H2O and defoamed with 0.4 kg tri-n-Bu phosphate at 800 rpm. The pigment paste was well dispersed, flowable, and storage-stable and had a pH of 9.0-9.5. A white **leather** finish was prepd. by mixing the pigment paste 200,H2O 400, 40% acrylic polymer binder 250, and 35% butadiene rubber binder 150 g to give a sprayable finish for either buffed or full-grain **leathers**.

=> d ind

L60 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
IC C09B067-42; C09B067-20; C09C003-10; C14C011-00; C09D003-81
CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 38, 41
ST acrylic polymer binder **leather** finish; ethyl acrylate copolymer **leather** finish; methyl methacrylate copolymer **leather** finish; vinyl acetate copolymer **leather** finish; vinylpyrrolidone copolymer **leather** finish
IT **Leather**
Leather substitutes
(finishes for, acrylic polymer pigment binders for)
IT Acrylic polymers, uses and miscellaneous
RL: USES (Uses)
(pigment binders, for **leather** finishes)
IT 85721-79-5 87150-69-4 87150-70-7
RL: USES (Uses)
(pigment binders, for **leather** finishes)

=> d bib abs 4,9-10,12,13,15-16

L59 ANSWER 4 OF 16 HCAPLUS ©COPYRIGHT 2001 ACS
AN 2000:122837 HCAPLUS
DN 132:141597
TI The use of ozone as **microbiocide** in cooling water treatment - experiences with an "all-organic" program
AU Noks, Eduard; Olkis, Anton; Kleinstuck, Roland; Johnson, Donald A.
CS Germany
SO PowerPlant Chem. (1999), 1(4), 36-40, 69-73
CODEN: POCHFT; ISSN: 1438-5325
PB PowerPlant Chemistry GmbH
DT Journal
LA English/German
AB Biofouling prevention in cooling water system using ozonization in combination with org. phosphonates is described.
RE.CNT 9
RE
(1) Anon; Nalco TRA-CIDER Diagnostics for Advanced Biomanagement, Brochure E-50-E 1997
(2) Burda, P; NACE Corrosion/93 Paper No 488 1993
(3) Coppinger, D; Cooling Tower Institute Annual Meeting 1989
(4) Johnson, D; US 5415783 HCAPLUS
(8) Strittmatter, R; Ozone Science and Engineering 1993, V15, P47 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L59 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:346771 HCAPLUS
DN 126:318712
TI Acid **antimicrobial** cleaning composition for removing lime and other deposits
IN Ritter, Guenter
PA Ritter, Guenter, Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19536353	A1	19970403	DE 1995-19536353	19950929

AB The title compn., suitable for removing deposits and hygienically cleaning household, industrial, and personal items, comprises one or more anionic surfactants and an acid system contg. (alone or in combination) Al3+ salt, Fe3+ salt, inorg. acids, and/or org. acids. The cleaning compns. can be used for cleaning other than smooth surfaces, are nontoxic, and leave no residue. Thus, an aq. clear cleaning soln. comprised 5-20% Al sulfate and 0.02-15% Na lauryl sulfate.

L59 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:671716 HCAPLUS
DN 123:138365
TI Studies on the biosynthesis of fosfomycin
AU Hidaka, T.; Kuzuyama, T.; Seto, H.
CS Institute Molecular and Cellular Biosciences, University Tokyo, Japan
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1994), 36th, 181-7
CODEN: TYKYDS
DT Journal
LA Japanese
AB Through biosynthetic studies on fosfomycin using Streptomyces wedmorensis, its biosynthetic pathway was shown to consist of 4 steps: (1) intramol. rearrangement of phosphoenolpyruvate to phosphonopyruvic acid (PnPy) catalyzed by phosphoenolpyruvate phosphomutase, (2) **decarboxylation** of PnPy to generate **phosphonoacetaldehyde** (PnAA), (3) methylation of PnAA to provide 2-hydroxypropylphosphonic acid (HPP), and (4) epoxide formation to form the final product. It should be emphasized that the epoxide is formed by dehydrogenation of the alc. function of HPP and that unlike usual epoxidn., the mol. oxygen is not incorporated into fosfomycin. In addn., the genes responsible for the biosynthesis of fosfomycin which were clustered in an .apprx.11.0-kb

fragment on the chromosome were cloned. The nucleotide sequence of the fragment revealed the presence of 10 open reading frames including 4 biosynthetic genes and 2 resistance genes.

L59 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1991:566332 HCAPLUS
DN 115:166332
TI Cooling water treatment composition
IN Soeder, Kenneth; Helfeld, Mitchel
PA Jamestown Chemical Co., Inc., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5034155	A	19910723	US 1990-475931	19900206

AB The title compn. comprises (a) Na molybdate as a corrosion inhibitor >1, (b) benzotriazole as a corrosion inhibitor >1, (c) citric acid as an Fe dispersant >0.5, (d) a **microbiocide**, e.g., tris(hydroxymethyl)nitromethane, glutaraldehyde, or 2,2-dibromo-3-nitrilopropionamide >5, and (e) optionally a scale inhibitor, e.g., ethyl acrylate-maleic anhydride-vinyl acetate copolymer, or 2-**phosphono**-1,2,4-**butanetricarboxylic** acid, >0.25%, and the balance water.

L59 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1988:535017 HCAPLUS
DN 109:135017
TI Cleaning and disinfectant solutions for endoscopes
IN Disch, Karlheinz; Hachmann, Klaus; Bansemir, Klaus
PA Henkel K.-G.a.A., Fed. Rep. Ger.
SO Ger. Offen., 8 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3639322	A1	19880526	DE 1986-3639322	19861117
DE 3639322	C2	19890817		
IN 170219	A	19920229	IN 1987-MA535	19870727
DK 8705940	A	19880518	DK 1987-5940	19871112
DK 164799	B	19920824		
DK 164799	C	19930111		
EP 268227	A2	19880525	EP 1987-116781	19871113
EP 268227	A3	19891220		
EP 268227	B1	19990113		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 175577	E	19990115	AT 1987-116781	19871113
ES 2127715	T3	19990501	ES 1987-116781	19871113
FI 8705049	A	19880518	FI 1987-5049	19871116
FI 96576	B	19960415		
FI 96576	C	19960725		
NO 8704768	A	19880518	NO 1987-4768	19871116
NO 170873	B	19920914		
NO 170873	C	19921223		
AU 8781235	A1	19880519	AU 1987-81235	19871116
AU 601515	B2	19900913		
BR 8706157	A	19880621	BR 1987-6157	19871116
ZA 8708576	A	19880727	ZA 1987-8576	19871116
JP 63135123	A2	19880607	JP 1987-291641	19871117
JP 2575422	B2	19970122		
US 4784790	A	19881115	US 1987-121492	19871117
CA 1304029	A1	19920623	CA 1987-552063	19871117
US 4994200	A	19910219	US 1988-224506	19880726
AU 9065567	A1	19910131	AU 1990-65567	19901026
AU 625166	B2	19920702		
US 5223166	A	19930629	US 1990-618144	19901126
PRAI DE 1986-3639322		19861117		

US 1987-121492 19871117
US 1988-224506 19880726

AB A cleaning soln. contains .gtoreq.1 nonionic surfactants, .gtoreq.1 proteolytic enzymes, .gtoreq.1 conventional cleaners at pH 6-8. A disinfectant soln. contains .gtoreq.1 aliph. C2-8 dialdehydes and a complexing agent at pH 6-8. Endoscopes are cleaned and disinfected by treating the surface 1st with the above cleaning soln. at 55-65.degree. for 1-15 min and then with the above disinfectant soln. for 1-15 min at 55-65.degree.. A cleaning conc. contained ethoxylated C12-18 alkyl n-Bu ether 8, Alcalase 1, glycerol 6, 1,2-propylene glycol 3, Na gluconate 2.5, citric acid 2, Na cumene sulfonate 3, 4-HOC6H4CO2Me, and H2O to 100 parts by wt.; the pH of this mixt. was 5. A disinfectant soln. contained glutaraldehyde 20, phosphonobutanetricarboxylic acid 1, EtOH 8, and H2O to 100 parts by wt.; the pH of this mixt. was 4. The concn. was dild. to contain 0.45 g/L surfactant, 0.06 g/L enzyme, and 0.14 g/L Na gluconate and the disinfectant was dild. to contain 2.4 g/L glutaraldehyde and 0.12 g/L phosphonobutanetricarboxylic acid. A gastroscope was heated to 60.degree. and flushed with the cleaning soln. at that temp. for 10 min and then flushed with the disinfectant for 10 min. The gastroscope was contaminated with a soln. contg. 108 **microbes**/mL Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, Prote mirabilis, and Candida albicans, it was cleaned as above, and incubated for 72 h at 36.degree., and after that time the instrument was free of **microbes**.

L59 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:517315 HCAPLUS
DN 99:117315
TI Methods and results obtained from the toxicological and ecological tests of water treatment chemicals
AU Kaestner, Werner; Gode, Peter
CS Toxikol. Oekol. Lab., Henkel K.-G.a.A., Duesseldorf, 4000/1, Fed. Rep. Ger.
SO Z. Wasser Abwasser Forsch. (1983), 16(2), 39-47
CODEN: ZWABAQ; ISSN: 0044-3727
DT Journal
LA German
AB Compds. and formulations used as corrosion inhibitors, dispersing agents, hardness stabilizers, and biocides in circulating cooling and process waters and in air conditioning installations were evaluated for toxicol. and ecol. risks in use. Hydroxyethanediphosphonic acid [2809-21-4], aminotrimethylenephosphonic acid [6419-19-8], and 2-**phosphonobutane**-1,2,4-**tricarboxylic** acid [37971-36-1] are essentially nontoxic to aquatic organisms (algae, Daphnia, and fish), as well as the **microbiocides** dodeca [86438-44-0] and chloroisothiazoline [87051-49-8] and the corrosion inhibitor ZnCl2. A monocyclic substituted oxazolidine **microbiocide** was less toxic than the other **microbiocides**, and a acrylic acid-methacrylic acid polymer [25751-21-7] dispersing agent was less toxic than the phosphonic acid compds. Six com. treatment mixts. (5 were irritants and 1 was corrosive to skin and all were irritants and were corrosive to the eye) were evaluated ecol. based on concns. used, whether used in open or closed systems, and added continuously or batch wise. The biocide-contg. products have limited biodegradability.

L59 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2001 ACS
AN 1978:411928 HCAPLUS
DN 89:11928
TI **Antimicrobial** agents for industrial water
IN Kotone, Akira; Yasuda, Masahiro
PA Sakai Chemical Industry Co., Ltd., Sakai, Japan
SO Japan. Kokai, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 52139724	A2	19771121	JP 1976-16408	19760216
	JP 59000483	B4	19840107		

AB **Antimicrobial** agents for industrial water contain imidazolium compds. and tetra-Na 2-**phosphonobutane**-1,2,4-**tricarboxylate** (I) [66669-53-2]. Thus, an **antimicrobial** agent contg. 1-dodecyl-2-methyl-3-benzylimidazolium chloride [21054-72-8] and I (1:2 ratio) 10 ppm was added to water a circulation-type cooling water system, and after 1-h circulation a water sample was cultivated on an agar medium. No microorganism growth was obsd., compared to 5 .times. 106 of microorganisms when the agent was not added.

=> d ind 4

L59 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2001 ACS
CC 61-8 (Water)
ST cooling water biofouling control ozonization org phosphonate
IT Water purification
(biofouling control; biofouling prevention in cooling water system by ozonization and org. phosphonates)
IT Water purification
(ozonization; biofouling prevention in cooling water system by ozonization and org. phosphonates)
IT 2809-21-4, 1-Hydroxyethane-1,1-diphosphonic acid 6419-19-8, Amino-tris-methylene-phosphonic acid 37971-36-1, 2-**Phosphono**-butane-1,2,4-**tricarboxylic** acid
RL: RCT (Reactant)
(biofouling prevention in cooling water system by ozonization and org. phosphonates)

=> d ind 9

L59 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2001 ACS
IC ICM C11D001-37
CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 17, 63
ST **antimicrobial** acid cleaning compn; anionic surfactant **antimicrobial** cleaning compn; hygienic cleaning encrusted surface; scale removal acid **antimicrobial** cleaner
IT Fatty acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Me ester, sulfonate, anionic surfactants; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Dental appliances
Descaling
Swimming pools
(acid **antimicrobial** cleaning compn. for)
IT **Antimicrobial** agents
Disinfectants
(acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Carbohydrates, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acidic; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alkyl ethers, sulfates and phosphates, anionic surfactants; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Detergents
(cleaning compns.; acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Fatty alcohols
RL: TEM (Technical or engineered material use); USES (Uses)
(esters, anionic surfactants; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Anionic surfactants
(in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Ethoxylated alcohols
RL: TEM (Technical or engineered material use); USES (Uses)
(phosphates and sulfates, surfactants; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)
IT Dental appliances
(toothbrushes; acid **antimicrobial** cleaning compn. for)
IT 98-11-3D, Benzenesulfonic acid, alkyl derivs. 5138-18-1D, Sulfosuccinic acid, esters with fatty alcs. 7664-93-9D, Sulfuric acid, fatty alc. esters 25322-68-3D, alkyl ethers, sulfates and phosphates

RL: TEM (Technical or engineered material use); USES (Uses)
(anionic surfactants; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)

IT 50-21-5, uses 64-18-6, Formic acid, uses 64-19-7, Acetic acid, uses 77-92-9, Citric acid, uses 79-14-1, uses 87-69-4, uses 133-37-9, Racemic acid 144-62-7, Ethanedioic acid, uses 5329-14-6, Amidosulfonic acid 6303-21-5, Phosphinic acid 6915-15-7 7446-70-0, Aluminum chloride, uses 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid, uses 7681-38-1, Sodium hydrogen sulfate 9004-82-4, Sodium lauryl ether sulfate 10043-01-3, Aluminum sulfate 13598-36-2, Phosphonic acid 37971-36-1, 2-**Phosphonobutane**-1,2-4-**tricarboxylic** acid 189351-08-4
RL: TEM (Technical or engineered material use); USES (Uses)
(in acid **antimicrobial** cleaning compn. for removing lime and other deposits)

IT 151-21-3, Sodium lauryl sulfate, uses 25155-30-0, Sodium laurylbenzenesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; in acid **antimicrobial** cleaning compn. for removing lime and other deposits)

=> d bib abs hitstr 1

L45 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:911475 HCAPLUS
DN 134:58194
TI Leather tanning composition comprising water soluble moderator
IN **Jones, Christopher Raymond**; Collins, Gareth Rhys; **Talbot, Robert Eric**
PA Rhodia Consumer Specialties Limited, UK
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000079011	A1	20001228	WO 2000-EP5471	20000614

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

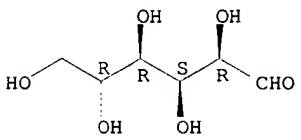
PRAI	GB 1999-14139	A	19990618
	GB 1999-18243	A	19990804
	GB 1999-18698	A	19990810

AB A mixt. of tris(hydroxymethyl)phosphine (THP) or of a THP salt, THP condensate or THP analog with at least one water sol. moderator is used to tan leather. The moderator is selected from metaphosphates and polyhydroxy or polypyrolidyl compds. such as sorbitol, glycerol, trimethylolpropane, pentaerythritol, mannitol, mono and disaccharide sugars, dialdehyde starch, alginates, polyvinyl alc. and polyvinyl pyrrolidone. Thus, 400g of brine pickled pelt rotated for 10 min with water at pH 4.6, added with 3% THP and 3% of glycerol at 35.degree. for 3 h, adjusted to pH 4.2 with sodium bicarbonate (the shrink temp. 64.degree.), and further adjusted to pH 6.5 (giving a shrink temp. of 77.degree.) was tested with sodium selenite and showed even penetration and the product was soft and pliable.

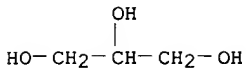
IT **50-99-7**, D-Glucose, uses **56-81-5**, Glycerol, uses **57-13-6D**, Urea, reaction product with trishydroxymethyl phosphine **57-50-1**, Sucrose, uses **63-42-3**, Lactose **69-79-4**, Maltose **77-99-6**, Trimethylolpropane **87-78-5**, Mannitol **115-77-5**, Pentaerythritol, uses **2767-80-8**, Tris(hydroxymethyl)phosphine **9002-89-5**, Polyvinyl alcohol **9003-39-8**, Poly(vinyl pyrrolidone) **9005-32-7**, Alginic acid **9047-50-1**, Dialdehyde starch
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(leather tanning compn. comprising water sol. moderator including)

RN 50-99-7 HCAPLUS
CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

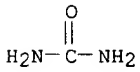
Absolute stereochemistry.



RN 56-81-5 HCAPLUS
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)

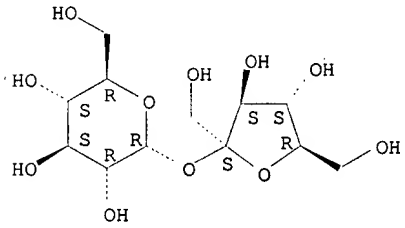


RN 57-13-6 HCAPLUS
CN Urea (8CI, 9CI) (CA INDEX NAME)



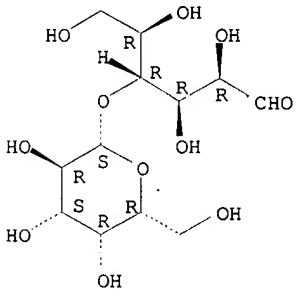
RN 57-50-1 HCAPLUS
CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



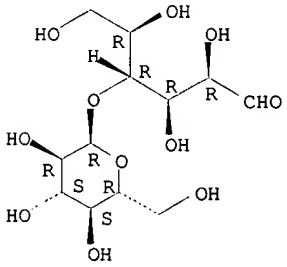
RN 63-42-3 HCAPLUS
CN D-Glucose, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

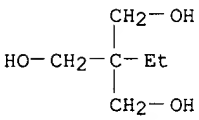


RN 69-79-4 HCAPLUS
CN D-Glucose, 4-O-.alpha.-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

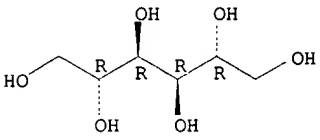


RN 77-99-6 HCAPLUS
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (8CI, 9CI) (CA INDEX NAME)

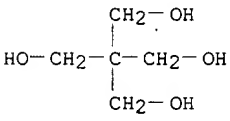


RN 87-78-5 HCAPLUS
CN Mannitol (8CI, 9CI) (CA INDEX NAME)

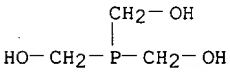
Relative stereochemistry.



RN 115-77-5 HCAPLUS
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



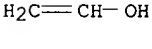
RN 2767-80-8 HCAPLUS
CN Methanol, phosphinidynetris- (9CI) (CA INDEX NAME)



RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

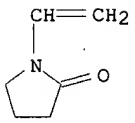
CRN 557-75-5
CMF C2 H4 O



RN 9003-39-8 HCAPLUS
CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0
CMF C6 H9 N O



RN 9005-32-7 HCAPLUS
CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9047-50-1 HCAPLUS
CN Starch, 2,3-dialdehydo (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RE.CNT 4
RE
(1) Albright & Wilson; GB 2055919 A 1981 HCAPLUS
(2) Chance, L; US 3914106 A 1975 HCAPLUS
(3) Collins, G; WO 9923261 A 1999 HCAPLUS
(4) Windus, W; US 2992879 A 1961 HCAPLUS

=> d bib abs hitstr 2

L45 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:861857 HCAPLUS
DN 134:30608
TI Leather tanning with tetrakis(hydroxymethyl)phosphonium salt-dialdehyde condensates
IN **Jones, Christopher Raymond**; Collins, Gareth Rhys; **Talbot, Robert Eric**
PA Rhodia Consumer Specialties Limited, UK
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000073513	A1	20001207	WO 2000-GB2018	20000525

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI GB 1999-12123 A 19990526
GB 1999-13580 A 19990612

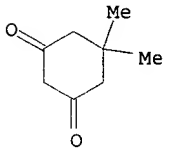
AB A condensate formed by the reaction of a tetrakis(hydroxymethyl)phosphonium salt with a dialdehyde such as glutaraldehyde is effective as a tanning agent for leather.

IT **111-30-8DP**, Glutaraldehyde, reaction products with tetrakis(hydroxymethyl)phosphonium salts **126-81-8DP**, 5,5-Dimethyl-1,3-cyclohexanedione, reaction products with tetrakis(hydroxymethyl)phosphonium salts **24655-84-3DP**, Tetrakis(hydroxymethyl)phosphonium, salts, reaction products with dialdehydes
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(leather tanning agents)

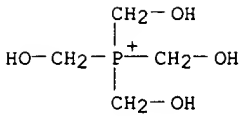
RN 111-30-8 HCAPLUS
CN Pentanedial (9CI) (CA INDEX NAME)

OHC-$(CH_2)_3$-CHO

RN 126-81-8 HCAPLUS
CN 1,3-Cyclohexanedione, 5,5-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 24655-84-3 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)- (8CI, 9CI) (CA INDEX NAME)



RE.CNT 4
RE
(1) Albright; EP 0385801 A 1990 HCAPLUS
(2) Donaldson, D; US 3734684 A 1973 HCAPLUS
(3) Suedleder GMBH & Co; EP 0808908 A 1997 HCAPLUS
(4) Windus, W; US 3104151 A 1963 HCAPLUS

=> d bib abs hitstr 3

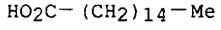
L45 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:260187 HCAPLUS
DN 132:283871
TI Leaching divalent metal salts
IN Odell, Barbara; **Jones, Christopher Raymond; Talbot, Robert Eric**
PA Albright & Wilson UK Limited, UK
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000021892	A1	20000420	WO 1999-GB3352	19991008
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9962174	A1	20000501	AU 1999-62174	19991008
PRAI GB 1998-22263	A	19981014		
GB 1998-27177	A	19981211		
WO 1999-GB3352	W	19991008		

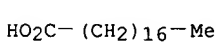
AB The compns. for leaching deposits of divalent metal salts such as ferrous sulfide comprise: (A) a tetrakis (hydroxymethyl)phosphonium salt; (B) an ammonium salt in a ratio of A:B of (0.01-100):1; and (c) sufficient of an acid, which is substantially unreactive with tetrakis(hydroxymethyl)phosphonium ion or ammonium ion to maintain the pH .ltoreq.4.5. The compns. may be solns. or particulate solids. The method is esp. applicable to ferrous sulfide deposits in oil wells and adjacent strata.

IT **57-10-3**, Hexadecanoic acid, uses **57-11-4**, Octadecanoic acid, uses **60-33-3**, Linoleic acid, uses **64-18-6**, Formic acid, uses **64-19-7**, Acetic acid, uses **76-03-9**, Tri chloro acetic acid, uses **110-15-6**, Butanedioic acid, uses **110-16-7**, Maleic acid, uses **110-94-1**, Glutaric acid **111-16-0**, Heptanedioic acid **112-80-1**, 9-Octadecenoic acid (9Z)-, uses **123-99-9**, Nonanedioic acid, uses **124-04-9**, Hexanedioic acid, uses **124-64-1**, Tetrakis (hydroxymethyl)phosphonium chloride **505-48-6**, Octanedioic acid **540-69-2**, Ammonium formate **631-61-8**, Ammonium acetate **5940-69-2**, Tetrakis (hydroxymethyl)phosphonium bromide **7580-37-2**, Tetrakis (hydroxymethyl)phosphonium acetate **7646-88-0**, Ammonium tri chloro acetate **7647-01-0**, Hydrochloric acid, uses **7664-38-2**, Phosphoric acid, uses **7664-93-9**, Sulfuric acid, uses **7782-99-2**, Sulfurous acid, uses **7783-20-2**, Ammonium sulfate, uses **10035-10-6** , Hydrogen bromide, uses **10043-35-3**, Boric acid, uses **10196-04-0**, Ammonium sulfite **11128-98-6**, Ammonium borate **12124-97-9**, Ammonium bromide **12125-02-9**, Ammonium chloride, uses **13446-12-3 13598-36-2**, Phosphorous acid **14798-03-9**, Ammonium, uses **22031-17-0**, Tetrakis (hydroxymethyl)phosphonium phosphate **24655-84-3** **25151-36-4**, Tetrakis (hydroxymethyl)phosphonium formate **55566-30-8**, Tetrakis (hydroxymethyl)phosphonium sulfate **110499-12-2 263747-72-4**, uses **263747-73-5** **263747-74-6**
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(leaching divalent metal salts such as ferrous sulfide from wells)

RN 57-10-3 HCAPLUS
CN Hexadecanoic acid (9CI) (CA INDEX NAME)

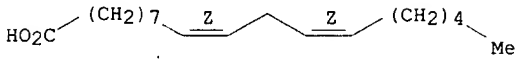


RN 57-11-4 HCAPLUS
CN Octadecanoic acid (9CI) (CA INDEX NAME)

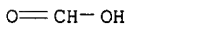


RN 60-33-3 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

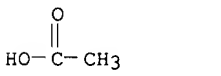
Double bond geometry as shown.



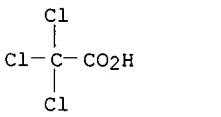
RN 64-18-6 HCAPLUS
CN Formic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



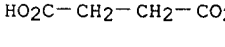
RN 64-19-7 HCAPLUS
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 76-03-9 HCAPLUS
CN Acetic acid, trichloro- (8CI, 9CI) (CA INDEX NAME)

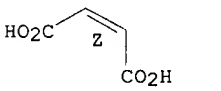


RN 110-15-6 HCAPLUS
CN Butanedioic acid (9CI) (CA INDEX NAME)



RN 110-16-7 HCAPLUS
CN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 110-94-1 HCAPLUS
CN Pentanedioic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_3-CO_2H$

RN 111-16-0 HCAPLUS
CN Heptanedioic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_5-CO_2H$

RN 112-80-1 HCAPLUS
CN 9-Octadecenoic acid (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

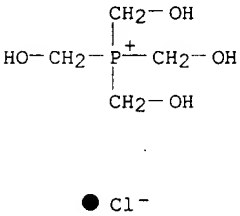
RN 123-99-9 HCAPLUS
CN Nonanedioic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_7-CO_2H$

RN 124-04-9 HCAPLUS
CN Hexanedioic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_4-CO_2H$

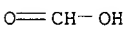
RN 124-64-1 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, chloride (8CI, 9CI) (CA INDEX NAME)



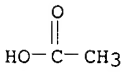
RN 505-48-6 HCAPLUS
CN Octanedioic acid (6CI, 9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_6-CO_2H$

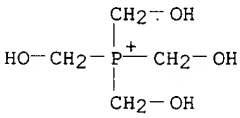
RN 540-69-2 HCAPLUS
CN Formic acid, ammonium salt (8CI, 9CI) (CA INDEX NAME)



RN 631-61-8 HCAPLUS
CN Acetic acid, ammonium salt (8CI, 9CI) (CA INDEX NAME)



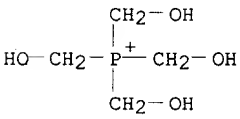
RN 5940-69-2 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, bromide (8CI, 9CI) (CA INDEX NAME)



RN 7580-37-2 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, acetate (salt) (8CI, 9CI) (CA INDEX NAME)

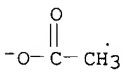
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P

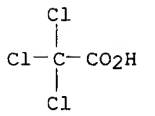


CM 2

CRN 71-50-1
CMF C2 H3 O2



RN 7646-88-0 HCAPLUS
CN Acetic acid, trichloro-, ammonium salt (8CI, 9CI) (CA INDEX NAME)

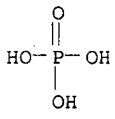


● NH_3

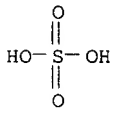
RN 7647-01-0 HCAPLUS
CN Hydrochloric acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

HCl

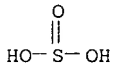
RN 7664-38-2 HCAPLUS
CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)



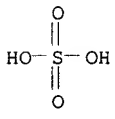
RN 7664-93-9 HCAPLUS
CN Sulfuric acid (8CI, 9CI) (CA INDEX NAME)



RN 7782-99-2 HCAPLUS
CN Sulfurous acid (8CI, 9CI) (CA INDEX NAME)



RN 7783-20-2 HCAPLUS
CN Sulfuric acid diammonium salt (8CI, 9CI) (CA INDEX NAME)



●2 NH_3

RN 10035-10-6 HCAPLUS
CN Hydrobromic acid (8CI, 9CI) (CA INDEX NAME)

HBr

RN 10043-35-3 HCAPLUS
CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)

RN 10196-04-0 HCAPLUS
CN Sulfurous acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)

●2 NH_3

RN 11128-98-6 HCAPLUS
CN Boric acid, ammonium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 12124-97-9 HCAPLUS
CN Ammonium bromide ((NH4)Br) (9CI) (CA INDEX NAME)

RN 12125-02-9 HCAPLUS
CN Ammonium chloride ((NH4)Cl) (9CI) (CA INDEX NAME)

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)

● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13598-36-2 HCAPLUS
CN Phosphonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

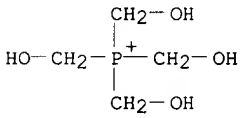
*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 14798-03-9 HCAPLUS
CN Ammonium (8CI, 9CI) (CA INDEX NAME)

NH_4^+

RN 22031-17-0 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, phosphate (3:1) (salt) (8CI, 9CI) (CA INDEX NAME)

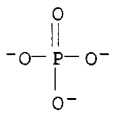
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P

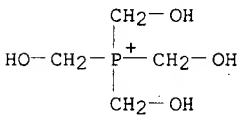


CM 2

CRN 14265-44-2
CMF O4 P



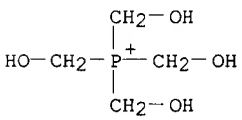
RN 24655-84-3 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)- (8CI, 9CI) (CA INDEX NAME)



RN 25151-36-4 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, formate (salt) (8CI, 9CI) (CA INDEX NAME)

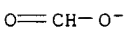
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

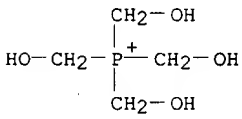
CRN 71-47-6
CMF C H O2



RN 55566-30-8 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

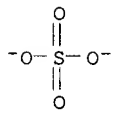
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

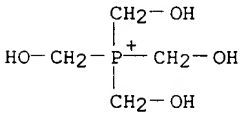
CRN 14808-79-8
CMF O4 S



RN 110499-12-2 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, phosphite (3:1) (salt) (9CI) (CA INDEX NAME)

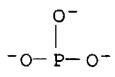
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

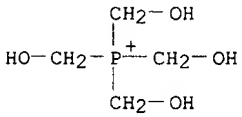
CRN 14901-63-4
CMF O3 P



RN 263747-72-4 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, salt with trichloroacetic acid (1:1) (9CI) (CA INDEX NAME)

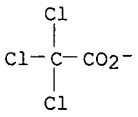
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

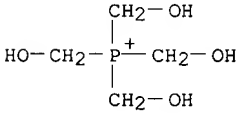
CRN 14357-05-2
CMF C2 Cl3 O2



RN 263747-73-5 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, salt with boric acid (H3BO3) (3:1) (9CI) (CA INDEX NAME)

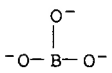
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

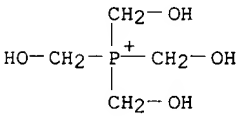
CRN 14213-97-9
CMF B O3



RN 263747-74-6 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, sulfite (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

CRN 14265-45-3
CMF O3 S

IT **1317-37-9**, Ferrous sulfide
RL: REM (Removal or disposal); PROC (Process)
(leaching divalent metal salts such as ferrous sulfide from wells)
RN 1317-37-9 HCAPLUS
CN Iron sulfide (FeS) (8CI, 9CI) (CA INDEX NAME)

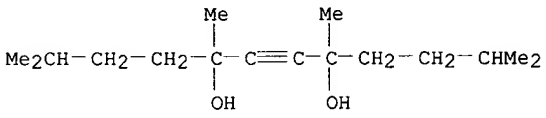
RE.CNT 6
RE
(1) Albright & Wilson; GB 2145708 A 1985 HCAPLUS
(2) Albright & Wilson; GB 2257043 A 1993 HCAPLUS
(3) Albright & Wilson; GB 2271787 A 1994 HCAPLUS
(4) Albright & Wilson; EP 0709518 A 1996 HCAPLUS
(6) Hooker Chemical; GB 1251032 A 1971 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr 4

L45 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:613578 HCAPLUS
DN 131:210409
TI Biocidal compositions of tetrakis (hydroxymethyl)phosphonium salts with an antifoaming agent
IN **Jones, Christopher Raymond; Talbot, Robert Eric**
PA Albright & Wilson UK Limited, UK
SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9946989	A1	19990923	WO 1999-EP1813	19990318
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9934151	A1	19991011	AU 1999-34151	19990318
EP 1063889	A1	20010103	EP 1999-915661	19990318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI GB 1998-5744	A	19980319		
WO 1999-EP1813	W	19990318		

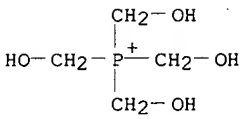
AB Foaming of synergistic biocidal mixts. of tetrakis(hydroxymethyl)phosphonium salts and surfactants is controlled by a C10-20 acetylenic diol.
IT **68227-33-8**, 2,5,8,11-Tetramethyldodeca-6-yne-5,8-diol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(Surfynol DF 110D; antifoaming agent in biocidal compns. contg. THPS and a surfactant)
RN 68227-33-8 HCAPLUS
CN 6-Dodecyne-5,8-diol, 2,5,8,11-tetramethyl- (9CI) (CA INDEX NAME)



IT **55566-30-8**, THPS
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(biocidal compns. contg. THPS, a surfactant and an antifoaming agent)
RN 55566-30-8 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

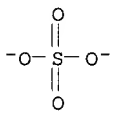
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P

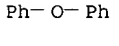


CM 2

CRN 14808-79-8
CMF O4 S



IT **101-84-8D**, Diphenyl oxide, sulfonated, mono/dialkylated
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(surfactant in biocidal compns. contg. THPS and an antifoaming agent)
RN 101-84-8 HCAPLUS
CN Benzene, 1,1'-oxybis- (9CI) (CA INDEX NAME)



RE.CNT 4
RE
(1) Albright; GB 2178960 A 1987 HCAPLUS
(2) Baker Chem Co J T; EP 0007112 A 1980 HCAPLUS
(3) Mobil Oil Corp; EP 0435444 A 1991 HCAPLUS
(4) Monsanto Co; EP 0526443 A 1993 HCAPLUS

=> d bib abs hitstr 5

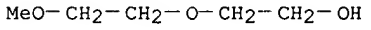
L45 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:460333 HCAPLUS
DN 131:84332
TI Synergistic biocidal compositions
IN **Jones, Christopher Raymond; Talbot, Robert Eric**
PA Albright and Wilson UK Limited, UK
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9933345	A1	19990708	WO 1998-EP8394	19981221
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9922753	A1	19990719	AU 1999-22753	19981221
	EP 1041885	A1	20001011	EP 1998-966392	19981221
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	NO 2000003267	A	20000802	NO 2000-3267	20000622
PRAI	GB 1997-27006	A	19971223		
	GB 1998-5407	A	19980314		
	GB 1998-5746	A	19980319		
	GB 1998-11778	A	19980603		
	GB 1998-20255	A	19980918		
	WO 1998-EP8394	W	19981221		

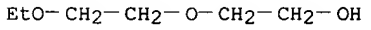
AB A synergistic biocide comprises a tris(hydroxymethyl)phosphine or a tetrakis(hydroxymethyl)phosphonium salt and at least one non-surfactant biopenetrant, such as a polymer or copolymer having a plurality of quaternary ammonium groups, a hydrotrope or a syntan, together optionally with a surfactant. Thus, an aq. compn. comprises tetrakis (hydroxymethyl)phosphonium salt and poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylenedichloride].

IT **71-43-2D**, Benzene, alkyl derivs., mixts.
tris(hydroxymethyl)phosphine or tetrakis (hydroxymethyl)phosphonium salts **111-77-3D**, Diethyleneglycol methyl ether, mixts.
tris(hydroxymethyl)phosphine or tetrakis(hydroxymethyl)phosphonium salts **111-90-0D**, Diethyleneglycol ethyl ether, mixts.
tris(hydroxymethyl)phosphine or tetrakis(hydroxymethyl)phosphonium salts **6881-94-3D**, mixts. tris(hydroxymethyl)phosphine or tetrakis(hydroxymethyl)phosphonium salts **31512-74-0D**, Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylenedichloride], mixts. tris(hydroxymethyl)phosphine or tetrakis(hydroxymethyl)phosphonium salts **50852-11-4D**, Naphthalene sulfonate, alkyl derivs., mixts. tris(hydroxymethyl)phosphine or tetrakis (hydroxymethyl)phosphonium salts **229314-68-5**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(synergistic biocidal compns.)
RN 71-43-2 HCAPLUS
CN Benzene (8CI, 9CI) (CA INDEX NAME)

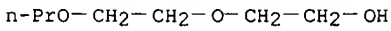
RN 111-77-3 HCAPLUS
CN Ethanol, 2-(2-methoxyethoxy)- (6CI, 8CI, 9CI) (CA INDEX NAME)



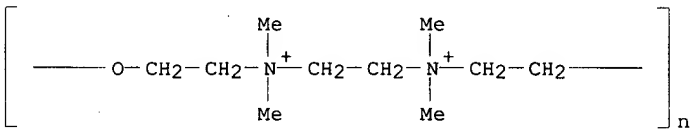
RN 111-90-0 HCAPLUS
CN Ethanol, 2-(2-ethoxyethoxy)- (8CI, 9CI) (CA INDEX NAME)

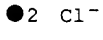


RN 6881-94-3 HCAPLUS
CN Ethanol, 2-(2-propoxyethoxy)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

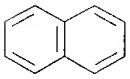


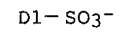
RN 31512-74-0 HCAPLUS
CN Poly[oxy-1,2-ethanediyl(dimethyliminio)-1,2-ethanediyl(dimethyliminio)-1,2-ethanediyl dichloride] (9CI) (CA INDEX NAME)





RN 50852-11-4 HCAPLUS
CN Naphthalenesulfonic acid, ion(1-) (9CI) (CA INDEX NAME)

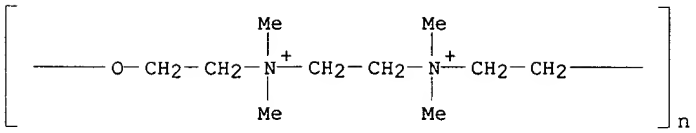




RN 229314-68-5 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1) (salt), mixt. with poly[oxy-1,2-ethanediyl(dimethyliminio)-1,2-ethanediyl(dimethyliminio)-1,2-ethanediyl dichloride] (9CI) (CA INDEX NAME)

CM 1

CRN 31512-74-0
CMF (C10 H24 N2 O)n . 2 Cl
CCI PMS



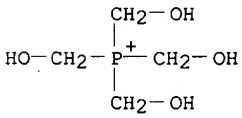
●2 Cl⁻

CM 2

CRN 55566-30-8
CMF C4 H12 O4 P . 1/2 O4 S

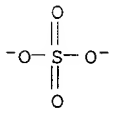
CM 3

CRN 24655-84-3
CMF C4 H12 O4 P



CM 4

CRN 14808-79-8
CMF O4 S



RE.CNT 5
RE
(1) Albright & Wilson; GB 2178960 A 1987 HCAPLUS
(2) Albright & Wilson; EP 0385676 A 1990 HCAPLUS
(3) Albright & Wilson; GB 2257043 A 1993 HCAPLUS
(4) Fabricom Air Conditioning Sa; WO 9104668 A 1991 HCAPLUS
(5) Frederick, S; US 3644083 A 1972 HCAPLUS

=> d bib abs hitstr 6

L45 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:311328 HCAPLUS
DN 130:339678
TI Tanning leather with tris(hydroxymethyl)phosphine
IN Collins, Gareth Rhys; **Jones, Christopher Raymond; Talbot, Robert Eric;** Williams, Jane; Zakikhani, Mohsen
PA Albright & Wilson UK Limited, UK
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

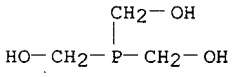
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9923261	A1	19990514	WO 1998-EP6837	19981028
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9913367	A1	19990524	AU 1999-13367	19981028
BR 9813033	A	20000815	BR 1998-13033	19981028
EP 1027460	A1	20000816	EP 1998-956886	19981028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI GB 1997-22806 A 19971030
GB 1998-20254 A 19980918
GB 1998-21084 A 19980930
WO 1998-EP6837 W 19981028

AB Leather is tanned by crosslinking collagen with tris(hydroxymethyl)phosphine (THP) or a condensate of a tetrakis(hydroxymethyl)phosphonium salt with an amide, urea or amine in a main tannage or retannage. THP alone or with the addn. of a syntan results in a particularly heat stable white leather.

IT **2767-80-8**, Tris(hydroxymethyl)phosphine **68850-64-6**, Proban CC **224310-22-9**, Proban ST
RL: NUU (Nonbiological use, unclassified); RCT (Reactant); USES (Uses) (for tanning leather)

RN 2767-80-8 HCAPLUS
CN Methanol, phosphinidynetris- (9CI) (CA INDEX NAME)



RN 68850-64-6 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, chloride, polymer with ammonia and urea (9CI) (CA INDEX NAME)

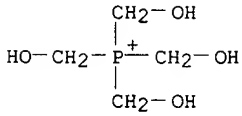
CM 1

CRN 7664-41-7
CMF H3 N

CM 2

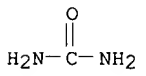
CRN 124-64-1

CMF C4 H12 O4 P . Cl



CM 3

CRN 57-13-6
CMF C H4 N2 O

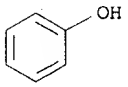


RN 224310-22-9 HCAPLUS
CN Proban ST (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9003-35-4**, Neosyn CPP 48 **114921-40-3**, Neosyn RW
224310-07-0, Neosyn DSF 2
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(syntan; for tanning leather)
RN 9003-35-4 HCAPLUS
CN Phenol, polymer with formaldehyde (9CI) (CA INDEX NAME)

CM 1

CRN 108-95-2
CMF C6 H6 O



CM 2

CRN 50-00-0
CMF C H2 O

RN 114921-40-3 HCAPLUS
CN Neosyn RW (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 224310-07-0 HCAPLUS
CN Neosyn DSF 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RE.CNT 4
RE

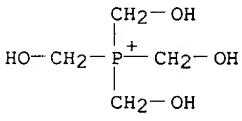
(1) Blc The Leather Technology Cen; GB 2287953 A 1995 HCAPLUS
(2) Ciba Geigy Ag; GB 2314342 A 1997 HCAPLUS
(3) Suedleder Gmbh & Co; EP 0808908 A 1997 HCAPLUS
(4) Wallace, W; US 3104151 A 1963 HCAPLUS

=> d bib abs hitstr 7

L45 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:244519 HCAPLUS
DN 130:248347
TI Stable microbicidal phosphonium salt composition
IN Fidoe, Stephen David; Imrie, Christopher David; **Jones, Christopher Raymond; Talbot, Robert Eric**
PA Albright & Wilson UK Limited, UK
SO PCT Int. Appl., 11 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9917614	A1	19990415	WO 1998-EP6290	19981002
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9911495	A1	19990427	AU 1999-11495	19981002
EP 1024700	A1	20000809	EP 1998-954327	19981002
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI GB 1997-21021	A	19971004		
WO 1998-EP6290	W	19981002		

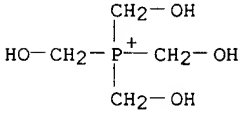
AB A solid compn. in powdery, granular, or tabletted form comprises solid acid substrate, such as adipic acid, coated with a tetrakis(hydroxymethyl)phosphonim salt. One application is microbicidal treatment of cooling water.
IT **24655-84-3D**, salts **55566-30-8**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(stable microbicidal phosphonium salt compn.)
RN 24655-84-3 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)- (8CI, 9CI) (CA INDEX NAME)



RN 55566-30-8 HCAPLUS
CN Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

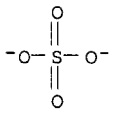
CM 1

CRN 24655-84-3
CMF C4 H12 O4 P



CM 2

CRN 14808-79-8
CMF O4 S



IT **124-04-9**, Adipic acid, uses
RL: MOA (Modifier or additive use); USES (Uses)
(stable microbicidal phosphonium salt compn. contg.)
RN 124-04-9 HCAPLUS
CN Hexanedioic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_4-CO_2H$

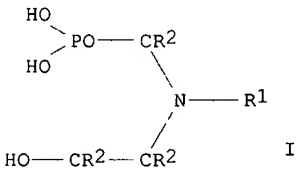
RE.CNT 1
RE
(1) Fujimasu, J; JP 07292152 A 1995 HCAPLUS

=> d bib abs hitstr 8

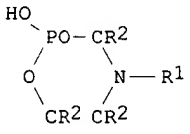
L45 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:522539 HCAPLUS
DN 127:140157
TI Scale inhibition in oil wells using alkanolamine methylene phosphonate
IN **Jones, Christopher Raymond; Talbot, Robert Eric**
PA Albright & Wilson UK Limited, UK
SO Brit. UK Pat. Appl., 16 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2306465	A1	19970507	GB 1996-21852	19961021
PRAI GB 1995-21509		19951020		

OS MARPAT 127:140157
GI



I

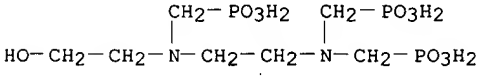


II

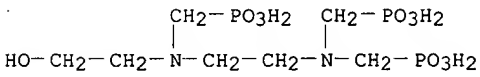
AB A method of inhibiting or preventing scale formation, e. g., barium scale, comprises adding a scale inhibiting amt. of an agent consisting of a methylene phosphonate deriv. of an alkanolamine. Preferably only a threshold amt., ie less than stoichiometric amt., of the agent is added, the threshold amt. being sufficient to inhibit scale. The method may be used to prevent scale formation in an oil well where brine is injected into an aquifer to form a soln. contg. at least 200 mg of alk. metal per L, and the agent is injected at the lower end of the aquifer. Preferably the scale inhibitor contains .gtoreq.1 phosphonate compd. of formula I or II, in which R = -H, -Me, -Et, -OMe; R1 = -OMe or -[(CR2)nNCR2PO3H2]mCR2PO3H2; n = 2 or 3, and m = 0-10.

IT **32685-03-3 32685-03-3D**, alkali metal salts
110685-63-7 129828-37-1 129828-37-1D, alkali metal salts **193071-17-9 193071-17-9D**, alkali metal salts **193071-18-0 193071-19-1**
RL: MOA (Modifier or additive use); USES (Uses)
(scale inhibition in oil wells using alkanolamine methylene phosphonate)

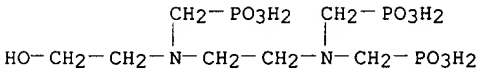
RN 32685-03-3 HCAPLUS
CN Phosphonic acid, [[[2-[(2-hydroxyethyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis- (9CI) (CA INDEX NAME)



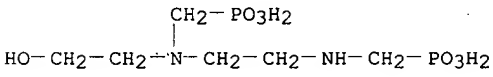
RN 32685-03-3 HCAPLUS
CN Phosphonic acid, [[[2-[(2-hydroxyethyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis- (9CI) (CA INDEX NAME)



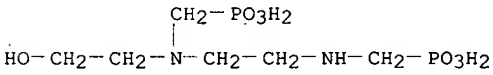
RN 110685-63-7 HCAPLUS
CN Phosphonic acid, [[[2-[(2-hydroxyethyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis-, sodium salt (9CI) (CA INDEX NAME)



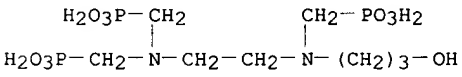
RN 129828-37-1 HCAPLUS
CN Phosphonic acid, [[(2-hydroxyethyl)[2-[(phosphonomethyl)amino]ethyl]amino]methyl]- (9CI) (CA INDEX NAME)



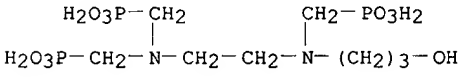
RN 129828-37-1 HCAPLUS
CN Phosphonic acid, [[(2-hydroxyethyl)[2-[(phosphonomethyl)amino]ethyl]amino]methyl]- (9CI) (CA INDEX NAME)



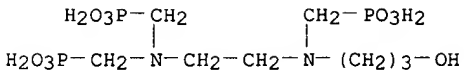
RN 193071-17-9 HCAPLUS
CN Phosphonic acid, [[[2-[(3-hydroxypropyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis- (9CI) (CA INDEX NAME)

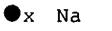


RN 193071-17-9 HCAPLUS
CN Phosphonic acid, [[[2-[(3-hydroxypropyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis- (9CI) (CA INDEX NAME)

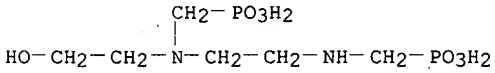


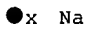
RN 193071-18-0 HCAPLUS
CN Phosphonic acid, [[[2-[(3-hydroxypropyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis-, sodium salt (9CI) (CA INDEX NAME)





RN 193071-19-1 HCAPLUS
CN Phosphonic acid, [[(2-hydroxyethyl)[2-[(phosphonomethyl)amino]ethyl]amino]methyl]-, sodium salt (9CI) (CA INDEX NAME)

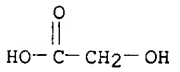




IT **7440-39-3**, Barium, processes
RL: REM (Removal or disposal); PROC (Process)
(scale inhibition in oil wells using alkanolamine methylene phosphonate)
RN 7440-39-3 HCAPLUS
CN Barium (8CI, 9CI) (CA INDEX NAME)

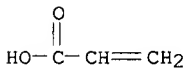
Ba

```
=> d bib abs hitstr 9

L45  ANSWER 9 OF 9  HCAPLUS  COPYRIGHT 2001 ACS
AN   1997:425041  HCAPLUS
DN   127:36909
TI   Drilling fluids
IN   Bryan, Edward; Grover, Boyd William; Jones, Christopher Raymond;
     Talbot, Robert Eric
PA   Albright & Wilson Limited, UK
SO   Brit. UK Pat. Appl., 24 pp.
     CODEN: BAXXDU
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
PI   GB 2304754         A1   19970326       GB 1995-17371    19950824
AB   The invention relates to the use of aq. surfactant compn. as, or in
     drilling fluids, including spacer fluids, packing fluids, or completion
     fluids, wherein the compns. comprise (i) <5 wt.% .gtoreq.1 of polymeric
     compds., (ii) optionally, dissolved electrolyte, (iii) <10 wt.% of
     surfactant, the surfactant being present as an aq. structured surfactant,
     which is a soln. contg. surfactant micelles or interspersed with a
     spherulitic surfactant, in a quantity sufficient to inhibit disintegration
     of shale and to maintain the rock cuttings in suspension under normal
     drilling conditions, and (vi) 0-10 wt.% of a weighting agent, all wts.
     being based on total wt. of the compn.  A method of improving the drilling
     properties of conventional unweighted water-based drilling fluids
     comprising one or more polymeric compds. and optionally dissolved
     electrolyte is also provided.  Also drilling fluid compns. are provided.
IT   7447-40-7, Potassium chloride, uses 9000-01-5, Acacia
     gum 9000-30-0, Guar gum 9004-32-4, Sodium
     carboxymethyl cellulose 11138-66-2, Xanthan gum
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (drilling fluids with improved fluid-loss control properties contg.
        surfactants and)
RN   7447-40-7  HCAPLUS
CN   Potassium chloride (KCl) (9CI)  (CA INDEX NAME)


Cl-K

RN   9000-01-5  HCAPLUS
CN   Gum arabic (8CI, 9CI)  (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN   9000-30-0  HCAPLUS
CN   Guar gum (9CI)  (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN   9004-32-4  HCAPLUS
CN   Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI)  (CA INDEX NAME)

     CM   1

     CRN  9004-34-6
     CMF  Unspecified
     CCI  PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

     CM   2

     CRN  79-14-1
     CMF  C2 H4 O3
```

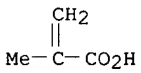


RN 11138-66-2 HCAPLUS
CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **79-10-7D**, 2-Propenoic acid, esters, polymers **79-41-4D**, esters, polymers **110-16-7D**, 2-Butenedioic acid (Z)-, derivs., polymers
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(drilling fluids with improved fluid-loss control properties contg. surfactants and polymeric compds.)
RN 79-10-7 HCAPLUS
CN 2-Propenoic acid (9CI) (CA INDEX NAME)

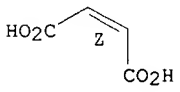


RN 79-41-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)

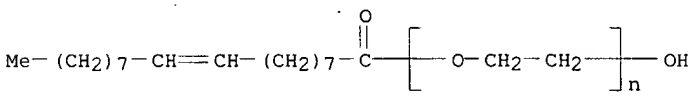


RN 110-16-7 HCAPLUS
CN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



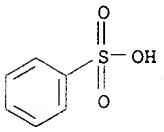
IT **9004-96-0**, Empilan BQ 100
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(surfactant; drilling fluids with improved fluid-loss control properties contg.)
RN 9004-96-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[(9Z)-1-oxo-9-octadecenyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT **190914-10-4**, Empilan KB 4
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(surfactant; drilling fluids with improved fluid-loss control properties contg. surfactants and polymeric compds.)
RN 190914-10-4 HCAPLUS
CN Empilan KB 4 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **98-11-3D**, Benzenesulfonic acid, alkyl derivs., salts
RL: NUU (Nonbiological use, unclassified); USES (Uses)

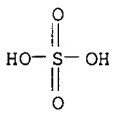
(surfactants; drilling fluids with improved fluid-loss control
properties contg. surfactants and polymeric compds.)
RN 98-11-3 HCAPLUS
CN Benzenesulfonic acid (8CI, 9CI) (CA INDEX NAME)



IT **1317-60-8**, Haematite, uses **13462-86-7**, Barite
RL: MOA (Modifier or additive use); NUU (Nonbiological use, unclassified);
USES (Uses)
(weighting agent; drilling fluids with improved fluid-loss control
properties contg. surfactants and polymeric compds.)
RN 1317-60-8 HCAPLUS
CN Hematite (Fe2O3) (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
O	3	17778-80-2
Fe	2	7439-89-6

RN 13462-86-7 HCAPLUS
CN Barite (Ba(SO4)) (9CI) (CA INDEX NAME)



● Ba